Message Text

UNCLASSIFIED

PAGE 01 LAGOS 08174 01 OF 02 051135Z ACTION AF-10

INFO OCT-01 ISO-00 SOE-02 AID-05 CEA-01 CIAE-00 COME-00 DODE-00 EB-08 DOE-15 H-02 INR-10 INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-05 ICA-20 OES-07 SP-02 SS-15 STR-07 TRSE-00 ACDA-12 /136 W ------020002 051139Z /12/21

P 031458Z JUL 78 FM AMEMBASSY LAGOS TO SECSTATE WASHDC PRIORITY 9266

UNCLAS SECTION 1 OF 2 LAGOS 8174

CORRECTED COPY (TEXT)

E.O. 11652: N/A

TAGS: ENRG, TECH, NI, KECM

SUBJECT: INTERNATIONAL SOLAR COMMERCIALIZATION WORK GROUP

PASS TO: WILLIAM CORCORAN

OFFICE OF CONSERVATION AND SOLAR APPLICATIONS

DEPARTMENT OF ENERGY

20 MASS. AVE.

WASHINGTON, D.C. 20545

SUMMARY: THIS OVERVIEW OF KENYA AND CAMEROON FOR PANEL 6, DPR BY ISCWG, BASED ON 15 INTERVIEWS. END SUMMARY.

- 1. KENYA: THIS COULD BE A LARGE MARKET FOR SOLAR ENERGY AS ALL OIL IS IMPORTED.
- 2. OF 300 MW INSTALLED, 80 PERCENT IS OIL FIRED AND 20 PERCENT HYDRO.
- 3. GOOD GEOTHERMAL RESOURCES: 9 MW PROVE, 6 MW UNDER CONSTRUCTION FINANCED BY WORLD BANK: AN ESTI-UNCLASSIFIED

UNCLASSIFIED

PAGE 02 LAGOS 08174 01 OF 02 051135Z

MATED 170-500 MY POTENTIAL.

4. KENYA CONTRACTED WITH UN FOR A 1 YEAR 1 MAN ENERGY SURVEY JUST BEGINNING. THIS WILL REACH GOK THRU ITS NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY, AN ADVISORY BODY. THE STUDY INCLUDES A DEMONSTRATION PROJECT BUT GOK DOES NOT WANT IT.

- 5. SO FAR THE ENERGY SURVEY HAS FOCUSED ON RURAL APPLICATIONS AND PARTICULARLY THE PROBLEM OF SLOWING DEFORESTATION BY FINDING AN ALTERNATIVE TO CHARCOAL FOR COOKING. THE CONCENSUES HERE IS THAT SOLAR COOKERS ARE NOT THE ANSWER ALTHROUGH BIOGAS DIGESTERS PROVIDING METHANE MAY BE IF SOCIALLY ACCEPTED.
- 6. THE STRONG NATIONAL POLICY OF SELF-SUFFICIENCY LEADS TO THE NEED FOR TRANSFER OF SOLAR TECHNOLGY BUT LOCAL MANUFACTURE OF SOLAR COMPONENTS. COOPERATION IS READILY AVAILABLE IF IT FITS THIS POLICY.
- 7. THE ENGINEERING FACULTY AT THE UNIVERSITY OF NAIROBI ARE WORKING ON SOLAR DEVICES WITH EMPHASIS ON SIMPLICITY SUCH AS WINDMILLS MADE FROM LOCAL MATERIALS SOLAR H/W, DISTILLATION, COOKING, AND REFRIGERATION BIOMASS BIOMASS PROJECTS INCLUDE DIGESTERS ON A VILLAGE SCALE FOR COOKING AND ADAPTATION OF A GASOLINE ENGINE TO OPERATE ON METHANE. THE ENGINEERING FACULTY ACTS AS A CONSULTING GROUP FOR SOLAR APPLICATIONS. THE UNIVERSITY HAS COLLECTED WIND DATA BUT IT IS NOT YET READY FOR DISTRIBUTION.
- 8. THE MANAGEMENT OF THE UNITED NATIONS ENVIRONMENT PROGRAM IS BASED INZLA 6-. ONE OF ITS THREE PROJECTS IS A RENEWABLE ENERGY WITH A MEETING UNCLASSIFIED

UNCLASSIFIED

PAGE 03 LAGOS 08174 01 OF 02 051135Z

SCHEDULED NEXT MARCH IN BANGKOK ON DESERTIFICATION, SOLAR, WIND, AND BIOGAS. DEMONSTRATIONS PROGRAMS OF RENWEABLE RESOURCES ARE PLANNED FOR SHRI LANKA, SENEGAL, MEXICO, AND THE PHILIPPINES.

- 9. CAMEROON: RICH IN HYDRO RESOURCES. PRESENT HYDRO, 263 MW PLUS 51 THERMAL FOR TOTAL OF 314 MW. UNDER CONSTRUCTION AT SONG LAULAU IN SOUTHERN REGION IS DAM WITH 28 MW CAPACITY. IN NORTHERN SECTION A 74 MW HYDRO PLANT IS BEING BUILT AT LAGDO BY THE CHINESE AS AN AID PROJECT. GOC PLANS TO EXTEND THE LAGDO GRID TO NORTHERN TOWNS AND MOVE EXISTING THERMAL PLANTS, SUCH AS 40-50 KW DIESEL GENERATORS. TO OTHER TOWNS NOT ON THE GRID.
- 10. THE POWER FROM SONG LAULAU AND LAGDO PLANTS IS DEDICATED PRIMARILY TO ATTRACTING MORE INDUSTRY. AS AN INCENTIVE, POWER IS SOLD BELOW COST TO INDUSTRY. PRESENT HYDRO BUSBAR ENERGY COST IS 2.7 CENTS/KWH BUT A LARGE ALUMINIUM PLANT HERE PAYS ONLY 0.73 CENTS/KWG. THE CONSUMER PAYS 30 CENTS/KWH OR 40 TIMES MORE THAN THE ALUMINIUM PLANT. IN ANOTHER EXAMPLE, THE GOC

BUILT A THERMAL PLANT FOR AN INDUSTRIAL USER: THE POWER COST WAS 10 CENTS/KWH BUT THE USER PAID LESS THAN HALF THE COST. SOME DIESEL GENERATING PLANTS HAVE COSTS AS HIGH AS 60 CENTS/KWH. CONSUMER POWER PRICES AT 4 LEVELS: PLUS 21 CENTS/KWH IN DOUALA, 23 IN YAOUNDE, 27-32 IN SMALLER TOWNS, AND AS HIGH AS 40 IN SECONDARY CENTERS.

UNCLASSIFIED

NNN

UNCLASSIFIED

PAGE 01 LAGOS 08174 02 OF 02 050933Z ACTION AF-10

INFO OCT-01 ISO-00 SOE-02 AID-05 CEA-01 CIAE-00 COME-00 DODE-00 EB-08 DOE-15 H-02 INR-10 INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-05 ICA-20 OES-07 SP-02 SS-15 STR-07 TRSE-00 ACDA-12 /136 W

-----019324 050940Z/21

P 031458Z JUL 78 FM AMEMBASSY LAGOS TO SECSTATE WASHDC PRIORITY 9267

UNCLAS FINAL SECTION 2 OF 2 LAGOS 08174

- 11. ONE PRODUCING OIL WELL, ACTIVE OIL EXPLORATION,
 A 1.5 MILLION TONS/YEAR REFINERY UNDER CONSTRUCTION
 AND A MODEST DEMAND WILL SOON MAKE CAMEROON SELFSUFFICIENT IN OIL FOR AN ESTIMATED 15 YEARS.
 REGULAR GASOLINE COST CONSUMERS ABOUT DOLLARS 1.15/ GALLON.
- 12. THE HIGH ELECTRIC PRICES CHARGED CONSUMERS, THE HIGH COST OF ELECTRIC POWER BY DIESEL GENERATORS, THE HIGH COST OF FUEL, AND THE NEED FOR POWER BEYOND THE GRID ON THE SEMI-ARID AREA OF THE NORTH ALL MAKE SOLAR ENERGY A VIABLE ALTERNATIVE.
- 13. SOFIRATES, FRENCH FIRM, HAS INSTALLED A SOLAR PUMP AT MAKARI, ANOTHER FRENCH FIRM, PUMP-GUINARD ATTEMPTED TO INSTALL A PV PUMP IN THE NORTH BUT FAILED BECAUSE OF A WATER PROBLE.
- 14. GOC IS OPEN AND WILLING TO COOPEATE WITH OTHERS WHO FURNISH AID BUT THIS MUST BE PURSUED. POSSIBLE U.S. COOPERATIVE PROJECTS ARE: (A) PROVIDING SOLAR RADIATION INSTRUMENTATION FOR A PROPOSED COUNTRY WIDE MEASUREMENT PROJECT AND (B) TECHNICAL

MANPOWER TO ACCELERATE THE ENERGY DEMAND AND RESOURCE STUDY.
UNCLASSIFIED

UNCLASSIFIED

PAGE 02 LAGOS 08174 02 OF 02 050933Z

15. AUGUSTIN SIMO AND NICOLAS NJABA-KABA ARE COMIVNG TO THE U.S. JULY 16 ON A 30 DAY ICA TOUR OF ENERGY RESEARCH AND TECHNOLOGY. ISCWG PROPOSES THAT DOE/CAS TAKE THE LEAD IN EXTENDING THE VISIT BY AT LEAST TWO WEEKS. THIS MIGHT APPLY TO OTHER AFRICAN REPRESENTATIVES AS WELL. THE EXTENSION SHOULD BE USED TO MAKE THESE REPRESENTATIVES ACQUAINTED WITH SYSTEMS APPLICABLE TO AFRICA, ESPECIALLY RURAL AND AGRICULTURAL APPLICATIONS.

16. ANOTHER OPPORTUNITY IS FOR DOE TO FIND MEANS FOR BRINGING SOCIETE NATIONALE DE L'ELECTRICITE DE CAMEROON (SONEL) OFFICIALS TO THE U.S. AS THEY ARE THE NATIONAL ELECTRIC UTILITY RESPONSIBLE FOR SUPPLYING POWER.

17. BIOMASS HAS GOOD POTENTIAL HERE. THE FACULTY AT THE NATIONAL SCHOOL OF HIGHER STUDIES OF POLYTECHBIQUES HAVE BUILT A SIMPLE WORKING DIGESTER CAPABLE OF GENERATING 1 M3/DAY OF METHANE, WHICH WOULD PROVIDE COOKING FOR A FAMILY OF FIVE. IT USES 10 E OF WATER AND 10 E OF COW MANURE BUT OTHER MATERIALS WILL WORK. THE COST IS ABOUT DOLS 100, ITS USE IN THE NORTH WOULD HELP SLOW DEFORESTATION. GOC PLANS TO SPEND DOLS MILLION FOR A 2500 HECTARE PLANTATION OF ECULYPTUS TREES FOR TELEPHONE POLES. THE WASTE COULD BE USED FOR A BIOMASS PLANT. EASUM

UNCLASSIFIED

NNN

Message Attributes

Automatic Decaptioning: X Capture Date: 01 jan 1994 Channel Indicators: n/a

Current Classification: UNCLASSIFIED

Concepts: CONSERVATION, SOLAR ENERGY, SOLAR POWER

Control Number: n/a Copy: SINGLE Draft Date: 03 jul 1978 Decaption Date: 01 jan 1960 Decaption Note: Disposition Action: n/a Disposition Approved on Date: Disposition Case Number: n/a Disposition Comment:

Disposition Comment:
Disposition Date: 01 jan 1960
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978LAGOS08174
Document Source: CORE
Document Unique ID: 00
Drafter: n/a

Drafter: n/a

Enclosure: n/a Executive Order: N/A Errors: N/A

Expiration: Film Number: D780279-0492 Format: TEL

From: LAGOS Handling Restrictions: n/a

Image Path:

ISecure: 1 Legacy Key: link1978/newtext/t197807100/aaaadgio.tel Line Count: 204

Litigation Code IDs: Litigation Codes:

Litigation History: Locator: TEXT ON-LINE, ON MICROFILM Message ID: f73ec06a-c288-dd11-92da-001cc4696bcc Office: ACTION AF

Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a

Page Count: 4
Previous Channel Indicators: n/a Previous Classification: n/a
Previous Handling Restrictions: n/a

Reference: n/a Retention: 0

Review Action: RELEASED, APPROVED Review Content Flags:

Review Date: 29 mar 2005 **Review Event:** Review Exemptions: n/a **Review Media Identifier:**

Review Release Date: N/A Review Release Event: n/a **Review Transfer Date:** Review Withdrawn Fields: n/a

SAS ID: 1846868 Secure: OPEN Status: NATIVE

Subject: INTERNATIONAL SOLAR COMMERCIALIZATION WORK GROUP PASS TO: WILLIAM CORCORAN OFFICE OF CONSERVATION AND

SOLAR APPLICATIONS TAGS: ENRG, TECH, NI

To: STATE Type: TE

vdkvgwkey: odbc://SAS/SAS.dbo.SAS_Docs/f73ec06a-c288-dd11-92da-001cc4696bcc

Review Markings: Sheryl P. Walter Declassified/Released **US Department of State** EO Systematic Review

20 Mar 2014

Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014